

OCT 7 - 2005

**510(k) SUMMARY OF SAFETY AND EFFECTIVENESS  
(Per 21 CFR 807.92)****General Company Information**

Name: Axya Medical, Inc.  
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**Date Prepared** September 27, 2005

**General Device Information**

Product Name: Model 6500 AxyaLoop™ Self-Tapping Bone Anchor

Classification: "Non-degradable soft tissue fixation fastener"  
Product code: MBI and HWC - Class II

**Predicate Devices**

Axya Model 2000 AxyaLoop™ Self-Tapping Bone Anchor  
[510(k) Number K011912]

Arthrex Inc. Corkscrew™ Suture Anchor  
Model AR-1925S [501(k) Number K003816]

**Description**

The device is designed with a corkscrew style thread 6.5 mm in diameter, for use in a range of soft tissue to bone attachment procedures. The Axya Bone Anchor will be made available as a system together with a bone punch and a placement tool (driver). These accessories are the same types of instruments included in procedure sets for currently marketed bone anchor systems. Axya Medical believes that the accessory instruments are Class I Manual Surgical Instruments and are exempt from the premarket Notification regulations. The Axya Model 6500 Self-Tapping Bone Anchor is prethreaded with polypropylene monofilament, nylon, braided polyester, and braided polyethylene suture material.

The Model 6500 Self-Tapping Bone Anchor is designed for use in both standard open surgical procedures and in minimally invasive (arthroscopic) surgical procedures.

### **Intended Use (Indications)**

The Axya Model 6500 AxyaLoop™ Self-Tapping Bone Anchor is indicated for securing synthetic non-absorbable suture to bone. This device is intended for use in repair of shoulder injuries. The 6.5 mm and 5 mm anchors may typically be used to repair rotator cuff injuries. The 3 mm anchor may typically be used to repair recurrent dislocation of the shoulder where the anchor is placed through the metaphyseal cortex such as in the case of a Bankart lesion repair procedure.

### **Substantial Equivalence**

This submission supports the position that the Axya Model 6500 Self-Tapping Bone Anchor is substantially equivalent to a number of previously cleared devices, including the Axya Model 2000 AxyaLoop Self-Tapping Bone Anchor [510(k) Number K011912] and the Arthrex Inc. Corkscrew Model AR-1324B Suture Anchor [510(k) Number K003816].

The 510(k) Notice contains summaries of an *in vitro* study that was conducted to evaluate the anchor pull-out strength as specified in the FDA Guidance Document for Testing Bone Anchor Devices (dated April 20, 1996).

The data presented demonstrate that the anchor pull-out force of the Axya Model 6500 AxyaLoop Self-Tapping Bone Anchor compared favorably with that of the predicate device of similar corkscrew geometry. The failure mode observed for the Axya anchor was predominately the same as that of the predicate anchor.

The single-patient-use components of the bone anchor system are provided sterile. The suture material and bone anchors are sterilized using a process equivalent to the process used by the original suture manufacturer.

### **Conclusion**

Axya Medical, Inc. believes that the information provided establishes that similar legally marketed have been used for the same clinical applications as the Axya Model 6500 Self-Tapping Bone Anchor. The materials from which the Axya device is fabricated have an established history of use in medical applications, and devices produced by Axya have been tested in accordance with applicable FDA guidelines.



OCT 7 - 2005

Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

Mr. Howard L. Schrayer  
Regulatory Affairs Consultant  
Axya Medical, Inc.  
100 Cummings Center  
Suite 444C  
Beverly, Massachusetts 01915

Re: K052491

Trade/Device Name: Model 6500 AxyaLoop™ Self-Tapping Bone Anchor

Regulation Number: 21 CFR 888.3040

Regulation Name: Smooth or threaded metallic bone fixation fastener

Regulatory Class: II

Product Codes: MBI, HWC

Dated: September 9, 2005

Received: September 13, 2005

Dear Mr. Schrayer:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

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This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at (240) 276-0120. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address <http://www.fda.gov/cdrh/industry/support/index.html>.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Mark N. Melkerson". The signature is stylized with a large, sweeping initial "M" and a long horizontal stroke extending to the right.

Mark N. Melkerson  
Acting Director  
Division of General, Restorative  
and Neurological Devices  
Office of Device Evaluation  
Center for Devices and  
Radiological Health

Enclosure

**INDICATIONS FOR USE**

510(k) Number (if known): K052491

Device Name: Axya, Model 6500 AxyaLoop™ Self-Tapping Bone Anchor

Indications For Use:

The Axya Model 6500 AxyaLoop™ Self-Tapping Bone Anchor is indicated for securing synthetic non-absorbable suture to bone. This device is intended for use in repair of shoulder injuries. The 6.5 mm and 5 mm anchors may typically be used to repair rotator cuff injuries. The 3 mm anchor may typically be used to repair recurrent dislocation of the shoulder where the anchor is placed through the metaphyseal cortex such as in the case of a Bankart lesion repair procedure.

Prescription Use   X    
(Part 21 CFR 801 Subpart D)

AND/OR

Over-The-Counter Use \_\_\_\_\_  
(21 CFR 807 Subpart C)

(PLEASE DO NOT WRITE BELOW THIS LINE - CONTINUE ON ANOTHER PAGE IF NEEDED)

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Concurrence of CDRH, Office of Device Evaluation (ODE)



**(Division Sign-Off)**  
**Division of General, Restorative,**  
**and Neurological Devices**

510(k) Number K052491